

BEFORE THE DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION OF THE STATE OF MONTANA

In the matter of the repeal of ARM)	NOTICE OF PUBLIC HEARING
36.14.102, 36.14.103, 36.14.105,)	ON PROPOSED REPEAL,
36.14.801, the amendment of ARM)	AMENDMENT, AND
36.14.101, 36.14.201, 36.14.203,)	ADOPTION
36.14.204, 36.14.206 through)	
36.14.208, 36.14.301, 36.14.401,)	
36.14.402, 36.14.803, and the adoption)	
of New Rule I regarding dam safety and)	
permitting)	

To: All Concerned Persons

1. On July 19, 2012, at 1:00 p.m., the Department of Natural Resources and Conservation will hold a public hearing in the Fred Buck Conference Room (bottom floor), Water Resources Building, 1424 Ninth Avenue, Helena, Montana, to consider the proposed repeal, amendment, and adoption of the above-stated rules.

2. The department will make reasonable accommodations for persons with disabilities who wish to participate in this rulemaking process or need an alternative accessible format of this notice. If you require an accommodation, contact the department no later than July 2, 2012, to advise us of the nature of the accommodation that you need. Please contact Michele Lemieux, Montana Department of Natural Resources and Conservation, 1424 Ninth Avenue, Helena, MT 59620; telephone (406) 444-6613; fax (406) 444-0533; e-mail mlemieux@mt.gov.

3. The department proposes to repeal the following rules:

36.14.102 DUTIES AND AUTHORITY

AUTH: 85-15-110, MCA
IMP: 85-15-106, MCA

REASONABLE NECESSITY: This rule is being repealed because DNRC's duties and authorities are set forth in the Dam Safety Act (Title 85, Chapter 15, MCA). Also, much of this rule is not about authority but rather defines how capacities are determined for dams in series and for reservoirs that include excavations. The rules for defining capacity for hazard determination have been integrated with the text of New Rule I.

36.14.103 EXEMPTIONS

AUTH: 85-15-110, MCA
IMP: 85-15-107, MCA

REASONABLE NECESSITY: This rule is being repealed because exemptions are defined in statute (85-15-107, MCA).

36.14.105 LIABILITY

AUTH: 85-15-110, MCA

IMP: 85-15-305, MCA

REASONABLE NECESSITY: This rule is being repealed because the relationship between liability and the Dam Safety Act (act) is statutorily specified in 85-15-305, MCA.

36.14.801 JURISDICTIONAL SIZE OF THE DAM OR RESERVOIR

AUTH: 85-15-110, MCA

IMP: 85-15-106, 85-15-214, MCA

REASONABLE NECESSITY: This rule is being repealed because the act already defines jurisdiction.

4. The rules as proposed to be amended provide as follows, new matter underlined, deleted matter interlined:

36.14.101 DEFINITIONS In addition to the terms defined by 85-15-105, MCA, the following definitions apply in this subchapter, ~~Unless the context requires and clearly states otherwise, in these rules:~~

(1) through (5) remain the same.

~~(6) "Dam" means any artificial barrier, including appurtenant works, used to impound or divert water with an impounding capacity of 50 acre-feet or greater measured to the crest of the dam embankment.~~

~~(67)~~ (7) "Days" means calendar days, including Sundays and holidays. If the final day is in a time calculation falls on a holiday, or weekend, it the day shall be the next following day of business succeeding regular business day.

(8) and (9) remain the same but are renumbered as (7) and (8).

~~(10) "Existing dam or reservoir" means any dam or reservoir 50 acre-feet or greater complete and capable of impounding water prior to October 1, 1985, or under construction on that date and completed with reasonable diligence.~~

~~(944)~~ (11) "Height of dam" means the vertical distance from the lowest elevation of the dam crest to the lowest point of natural ground, including any stream channel, along the downstream toe of the dam.

~~(12) "High-hazard corps-inspected dam" means a dam that was determined to be high-hazard by the corps of engineers pursuant to P.L. 92-367 and for which a resultant dam safety report has been submitted to the owner.~~

(13) and (14) remain the same but are renumbered (10) and (11).

~~(15) "New dam" or "new reservoir" means a dam or reservoir where initial construction occurs after October 1, 1985.~~

(12) "Maximum normal operating pool":

(a) means the elevation of lowest uncontrolled principal spillway for on-stream reservoirs;

(b) means the elevation of the emergency spillway for flood control structures; and

(c) is defined on a case-by-case basis according to reservoir operation for off-stream reservoirs.

(16) remains the same but is renumbered (13).

(147) "Operation plan" means the written instructions prepared by the owner that prescribe:

(a) the proper operation procedures;

(b) maintenance procedures;

(c) emergency procedures, and warning plan; and

(d) any other features necessary to the safe operation of the dam or reservoir.

(18) remains the same but is renumbered (15).

AUTH: 85-15-110, MCA

IMP: 85-15-106, 85-15-209, 85-15-210, 85-15-212, MCA

REASONABLE NECESSITY: These amendments are reasonably necessary to conform with the statute, clarifying that non-high-hazard dams may also be regulated. Section (11) was added to clearly define "maximum normal operating pool", which is not defined in statute. The amendments also correct minor formatting and grammatical errors.

36.14.201 WHO HAS TO APPLY FOR HAZARD DETERMINATION

(1) An application for hazard determination must be made by an owner proposing to construct, including new construction, alteration, repair, enlargement, or removal of, any dam or reservoir that has or could impound to the ~~crest of the dam~~ maximum normal operating pool 50 acre-feet or more.

(a) This requirement applies even if the department performed a hazard determination on previous construction to the dam or reservoir and found it not to be a high-hazard dam. This requirement does not apply to the owner who already possesses a valid operation permit for the high-hazard dam.

(2) Applications for hazard determinations are not necessary for the following, as loss of life from dam failure is not likely to occur:

(a) wastewater pond dams that are subject to regulation under the Department of Environmental Quality;

(b) naturally occurring reservoirs;

(c) an obstruction in a canal used to raise or lower water inside the canal, or to divert water from the canal;

(d) a flood levee on the bank of a natural lake or stream, the primary purpose of which is to control floodwaters;

(e) railroad fill structure and road or highway fill not intended to store or accumulate water for future use; and

(f) an obstruction in the channel of a stream, watercourse, or floodplain, which has the single purpose of spreading water within the bed of the stream or watercourse or floodplain upstream from the obstruction for irrigation of only that land containing the spread water.

AUTH: 85-15-110, MCA

IMP: 85-15-107, 85-15-209, MCA

REASONABLE NECESSITY: The amendments are reasonably necessary to conform with the statute which defines capacity based on the elevation of the normal operating pool rather than the crest of the dam. The amendments also address wastewater pond dams subject to regulation by the Department of Environmental Quality (DEQ), which already have construction requirements where loss of life from dam failure is unlikely (offstream, upstream lining, low dam height, low angle embankment slopes, overflow pipes, significant below ground surface storage). An owner of a dam that has already been classified as high-hazard would have no need to apply for a hazard determination, thus stating that the requirement does not apply is irrelevant. There are two existing wastewater pond dams that were classified as high-hazard. However, they were built according to DEQ construction requirements and loss of life is not likely to occur for reasons stated above. The high-hazard designation would be rescinded for these dams. The amendments also correct minor formatting and grammatical errors.

36.14.203 MULTIPLE DAMS (1) A single application may be submitted for more than one dam ~~only~~ when the dams are:

(a) for the same reservoir or in series; and

(b) ~~the dams~~ would flood the same drainage if failure should occur.

AUTH: 85-15-110, MCA

IMP: 85-15-209, MCA

REASONABLE NECESSITY: The amendments are reasonably necessary because dams in series on a drainage have an effect on each other that warrant evaluation as a single system. The amendments also correct minor formatting and grammatical errors.

36.14.204 APPLICATION

(1) through (2)(c) remain the same.

(d) signature of owner or owner's authorized representative and date of the signature; and

(e) through (3) remain the same.

AUTH: 85-15-110, MCA

IMP: 85-15-209, MCA

REASONABLE NECESSITY: The amendments are reasonably necessary to allow for the fact that owners commonly task their engineers with permitting responsibilities.

36.14.206 CRITERIA FOR DETERMINATION (1) The department's hazard determination shall be based on the consequences of dam failure, ~~not the condition,~~ probability, or risk of failure.

(2) A dam must be classified high-hazard if the impoundment capacity is 50 acre-feet or larger measured at the maximum normal operating pool, and it is determined that a loss of human life is likely to occur within the breach flooded area as a result of failure of the dam.

(a) Loss of life is assumed likely to occur if the following structures are present or planned for as a matter of public record or notice in the breach flooded area:

- (i) occupied houses and farm buildings;
- (ii) stores;
- (iii) gas stations;
- (iv) parks;
- (v) golf courses;
- (vi) stadiums;
- (vii) ball parks; and
- (viii) interstate, principal, and other paved highways, including railroads, highway rest areas, RV areas, and developed campgrounds. Excluded from this list are unpaved county roads and all private roads.

(3) For purposes of the hazard determination classification in this section, the following apply.

(a2) ~~The breach flooded area, for the purpose of this classification only,~~ is the flooded area caused by a breach of the dam with the reservoir full to the crest of the ~~emergency spillway~~ maximum normal operating pool.

(b3) ~~The evaluation of the effects of flood inundation, for the purpose of classification,~~ will continue downstream until the flood stage is equal to that of the 100-year floodplain.

(c4) ~~The breach flow hydrograph and downstream routing of the breach flows, for the purpose of classification,~~ will be estimated by the department either by visual determination or dam breach modeling techniques.

~~(5) Loss of life is assumed to occur if the following structures are present or planned for as a matter of public record or notice in the breach flooded area: occupied houses and farm buildings, stores, gas stations, parks, golf courses, stadiums, ball parks, interstate, principal, and other paved highways, and including railroads, highway rest areas, RV areas, developed campgrounds; and excluding unpaved county roads and all private roads.~~

AUTH: 85-15-110, MCA

IMP: 85-15-209, MCA

REASONABLE NECESSITY: The amendments are reasonably necessary to conform with the statute which defines capacity based on the elevation of the normal

operating pool rather than the crest of the dam. The amendments also correct minor formatting and grammatical errors.

36.14.207 CHANGE IN CLASSIFICATION (1) A high-hazard dam owner may request the department to reconsider a hazard determination.

(a) A request for reconsideration must include the data and analyses necessary to show that the dam is not a high-hazard dam.

(b) The owner shall pay for reasonable inspection costs incurred by the department as a result of the reconsideration.

(2) A classification of high-hazard dam is automatically rescinded if the dam is constructed to impound less than 50 acre-feet measured to the ~~crest of the dam~~ maximum normal operating pool, or if the dam is breached.

(a) A construction permit is necessary to perform the construction to reduce the impoundment capacity of the high-hazard dam or breach the high-hazard dam.

AUTH: 85-15-110, MCA

IMP: 85-15-209, MCA

REASONABLE NECESSITY: The amendments are reasonably necessary to conform with the statute. Reservoir capacity for purposes of the Act is determined based on elevation of the normal operating pool rather than crest of the embankment. The amendments also correct minor formatting and grammatical errors.

36.14.208 DAMS IN SERIES (1) The worst case scenario shall govern for determining the hazard classification of dams in series where more than one mode of failure is possible among the dams. Classification shall be based on potential for failure under combined and, if applicable, individual dam breach scenarios.

(2) The upstream dam must be classified as a high-hazard dam if:

(a) If an upstream dam has the capability to create failure in a downstream high-hazard dam because of its failure flood wave, ~~the upstream dam must be classified as a high-hazard dam;~~ or

(3b) If the failure flood wave of the upstream dam will ~~cause failure of the downstream dam, and the combined flows will likely cause a loss of life, with or without failure of the downstream dam~~ the upstream dam must be classified as a high-hazard dam.

(3) Wastewater ponds that are separated by internal berms are not considered to be dams in series.

AUTH: 85-15-110, MCA

IMP: 85-15-209, MCA

REASONABLE NECESSITY: The amendments are reasonably necessary because there are situations where a downstream dam's spillway can handle the failure flood of an upstream dam. However, these high spillway flows can cause loss of life, as little warning time is available during a dam failure. The rule also clarifies that wastewater ponds separated by berms are not considered to be dams in a series

because wastewater ponds are lined and offstream; and, the failure of an internal berm or divider between wastewater pond cells and the subsequent failure of the pond is unlikely. The amendment helps clarify the hazard classification for dams in series and corrects minor formatting errors.

36.14.301 CONSTRUCTION PERMIT APPLICATION - GENERAL REQUIREMENTS (1) An owner who wishes to construct, alter, repair, enlarge, or remove a high-hazard dam shall apply for, and receive from the department a construction permit prior to any construction.

(2) remains the same.

~~(3) The requirements of this sub-chapter do not apply to high-hazard, corps-inspected dams until July 1, 1990.~~

(34) An application for a construction permit must include: the application form,

(a) the engineering design report, and three sets of ;

(b) the construction plans and specifications; and

(c) the application form provided by the department. The application form must:

(i) be signed by the owners of the dam or reservoir;

(ii) include the name, address, and phone number of the owner; and

(iii) include the name and purpose of the proposed dam or reservoir.

~~(5) Each application must include a form provided by the department and signed by the owners of the dam or reservoir. The application form must include the name, address, and phone number of the owner, name of the proposed dam or reservoir, and its purpose.~~

(6) through (8) remain the same but are renumbered (4) through (6).

AUTH: 85-15-110, MCA

IMP: 85-15-210, MCA

REASONABLE NECESSITY: The amendments are reasonably necessary because the date referred to in (3) has passed. Also, the move to electronic documentation negates the need to submit multiple copies. The amendments also correct minor formatting and grammatical errors.

36.14.401 OPERATION PERMIT REQUIREMENTS

(1) remains the same.

~~(a) by October 1, 1990, for an unpermitted high-hazard existing dam;~~

~~(b) by July 1, 1995, for an unpermitted high-hazard corps-inspected dam;~~

(ae) before operation of a high-hazard dam for which a construction permit has been issued; and

(bd) by the date specified in the permit for renewal of an operation permit for a permitted high-hazard dam.

AUTH: 85-15-110, 85-15-212, 85-15-213, MCA

IMP: 85-15-212, MCA

REASONABLE NECESSITY: The amendments are reasonably necessary because the dates referred to in the rule have passed.

36.14.402 OPERATION PERMIT APPLICATION - GENERAL

REQUIREMENTS (1) Applications, including applications for renewal, of a permit to operate high-hazard dams must include:

(a) an operation plan pursuant to ARM 36.14.403; and
(b) ~~an inspection report pursuant to ARM 36.14.603, notification that an inspection has been completed,~~ except for a new dam for which a construction permit has been issued.

(2) ~~The investigation and inspection report~~ A report of the inspection pursuant to ARM 36.14.603 must be submitted to the department within 90 days of the inspection, before the application can be considered complete. The inspection must be of the dam in its condition and configuration at the time of the application; and the investigation must have been conducted within 90 days of the date of submitting the application.

(3) Within 30 days of receipt of a permit application, the department shall:
(a) notify the applicant of any errors or omissions, and request any additional information necessary to properly evaluate the application. ~~The department shall ;~~
and

(b) establish a reasonable time frame for the applicant to submit the necessary information.

(4) After receipt of all required information, the department shall issue or deny the permit within 90 days, but not before approval of any construction pursuant to a construction permit.

AUTH: 85-15-110, 85-15-213, MCA

IMP: 85-15-212, MCA

REASONABLE NECESSITY: The amendments are reasonably necessary because it generally takes engineering firms a minimum of two months to prepare an inspection report, submit it to the owner for review, and finally submit it to DNRC. In order to complete the above tasks in advance of permit renewal date, the dam inspection must be done in advance of permit renewal date by several months. This often causes the dam inspection to be done at a less than ideal time (e.g. during the winter when snow covers the dam, or late fall when the reservoir is empty). It also causes the inspection date to be continually advanced at every renewal period. Timing of a dam inspection can be critical in order to do a proper evaluation. By only requiring that the inspection be complete by permit renewal date, not submittal of the report, engineers are given the flexibility to schedule the inspection that best suits that particular dam. All inspection reports will still be submitted in accordance with the requirements of ARM 36.14.603 which ensure the reports are timely and representative of the dam's current condition, as per 85-15-212 and 85-15-213, MCA. The amendments also correct minor formatting errors.

36.14.803 INVESTIGATION AND INSPECTION

(1) through (3) remain the same.

(4) Prior to the department-ordered inspection, notification must be given to the dam owner and complainant of the date and estimated cost of the inspection.

(a) Within a reasonable time, the owner shall provide all readily available engineering design and performance data to the department or inspector.

(b) The owner shall allow access and operate the dam and its facilities as directed by the inspector or the department for the inspection.

(5) If upon inspection the department finds the dam to be defective, the department shall order the necessary remedial action to eliminate the defect and make the dam, reservoir, or appurtenant works safe. The order must be in writing and delivered to the owner either personally or by certified mail ~~or personally~~.

(a) Remedial action may include submittal of an engineering design report, plans, and specifications.

AUTH: 85-15-110, MCA

IMP: 85-15-106, 85-15-214, 85-15-215, MCA

REASONABLE NECESSITY: The amendments are reasonably necessary because a review by DNRC engineers of methods and procedures used to repair or remediate the dam may be necessary to ensure the owner's compliance with 85-15-110 and 85-15-214, MCA. The amendments also correct minor formatting errors.

5. The rule as proposed to be adopted provides as follows:

NEW RULE I RESERVOIR CAPACITY DETERMINATION

(1) The department may calculate the reservoir capacity in acre-feet, in absence of detailed data, as 0.4 times the vertical height in feet from the downstream toe of the dam to the maximum normal operating pool times the water surface area at that level in acres.

(2) Reservoir capacity due to excavation in the impoundment area is excluded from capacity calculations.

(3) This rule applies to multiple or a series of dams erected on a valley, basin, coulee, or ravine where each reservoir is less than 50 acre-feet, but all are operated singly as one reservoir containing more than 50 acre-feet. Whether the series is operated as a single reservoir will be a question of fact in each instance. Factors to consider include:

(a) whether all dams or reservoirs are under the same ownership and control;

(b) whether all dams or reservoirs operate as a unit (i.e., if one of the dams or reservoirs suffers a change, it will in most instances affect one or more of the other dams or reservoirs); or

(c) whether the dams or reservoirs are physically proximate and on the same valley, basin, coulee, or ravine.

AUTH: 85-15-110, MCA

IMP: 85-15-106, 85-15-209, MCA

REASONABLE NECESSITY: The reservoir capacity determination was moved from ARM 36.14.102. Capacity determination is only a factor when deciding if a hazard

classification is required. This rule is reasonably necessary because previously, capacity due to excavation in the impoundment area was included in deciding whether or not a hazard classification application is required. However, below ground surface storage does not contribute to dam breach flood flows and potential loss of life and is neglected during a hazard determination. Hazard determination is based on the volume of reservoir that could exit the dam during a breach. The reservoir capacity determination was moved from ARM 36.14.102 to New Rule I(3) because capacity determination is only a factor when deciding if a hazard classification is required.

6. Concerned persons may submit their data, views, or arguments, either orally or in writing, at the hearing. Written data, views, or arguments may also be submitted in writing to: Michele Lemieux, Montana Department of Natural Resources and Conservation, 1424 Ninth Avenue, Helena, MT 59620; telephone (406) 444-6613; fax (406) 444-0533; e-mail mlemieux@mt.gov, and must be received no later than 5:00 p.m. on July 19, 2012.

7. Michele Lemieux, Department of Natural Resources and Conservation, has been designated to preside over and conduct the public hearing.

8. An electronic copy of this Notice of Public Hearing on Proposed Repeal, Amendment, and Adoption is available through the department's web site at <http://www.dnrc.mt.gov>. The department strives to make the electronic copy of this Notice of Public Hearing on Proposed Repeal, Amendment, and Adoption conform to the official version of the notice, as printed in the Montana Administrative Register, but advises all concerned persons that in the event of a discrepancy between the official printed text of the notice and the electronic version of the notice, only the official printed text will be considered.

9. The department maintains a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name, e-mail, and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding conservation districts and resource development, forestry, oil and gas conservation, trust land management, water resources, or a combination thereof. Notices will be sent by e-mail unless a mailing preference is noted in the request. Such written request may be mailed or delivered to Lucy Richards, 1625 Eleventh Avenue, Helena, MT 59620; fax (406) 444-2684; e-mail lrichards@mt.gov; or may be made by completing a request form at any rules hearing held by the department.

10. The bill sponsor contact requirements of 2-4-302, MCA, do not apply

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

/s/ Mary Sexton

MARY SEXTON

Director

Natural Resources and Conservation

/s/ Fred Robinson

FRED ROBINSON

Rule Reviewer

Certified to the Secretary of State on June 11, 2012.